Claims

1. A laryngeal mask (1) comprising at least one airway tube (2) and a mask portion (3), which mask portion (3) comprises a top face (4) and a bottom face (5), said bottom face (5) comprising a lumen (6) that communicates with the tube (2) interior (7), and said top face (4) comprising a closed transition face (8), said mask portion (3) being at least on the bottom face in the periphery delimited by an inflatable cuff (9), and said mask portion (3) comprising a joint throughout the entire internal circumference of the cuff (9), facing towards the lumen (6) for providing a closed cuff (9), **characterised in** that at least a portion of the airway tube (2) and the mask portion (3) is formed integrally with each other for providing an assembled integral structure and without assembly components between airway tube (2) and mask portion (3).

2. A laryngeal mask according to claim 1, **characterised in** that in general the inflatable part of the wall thickness of the cuff is smaller than the general wall thickness of the airway tube (2).

3. A laryngeal mask according to claim 2, **characterised in** that the inflatable part of the wall thickness of the cuff is comprised within a closed first interval (111) a,b; and that the wall thickness of the airway tube (2) is comprised within a closed second interval c,d and with an upper delimiting value d that exceeds the upper delimiting value b of the first interval (111).

4. A laryngeal mask according to any one of claims 1, 2 or 3, **characterised in** that the outer contour of the inner circumference of the cuff (9) is essentially elliptical, drop-shaped, annularly extending or a variety thereof.

5. A laryngeal mask according to any one of claims 2-4, **characterised in** that the general wall thickness of the top face (4) is smaller than the general

wall thickness of the airway tube (2), and larger than the general wall thickness of the cuff (9).

6. A laryngeal mask according to any one of claims 2-6, **characterised in** that the wall thickness of the top face (4) is comprised within a third interval whose lower limit is larger than a.

7. A laryngeal mask according to any one of claims 2-6, **characterised in** that the cuff (9), the top face (4) and/or the airway tube (2) has/have sections of a larger or smaller wall thickness than the general wall thickness.

8. A laryngeal mask according to claim 8, **characterised in** that the wall of the cuff (9) exhibits varying material thicknesses and is comprised within the first interval (111).

9. A laryngeal mask according to any one of the preceding claims, **characterised in** that the laryngeal mask further comprises a rigid tubing (114) in extension of the airway tube (2) which is completely or partially enclosed by an outer jacket (117) configured as an integral part of the airway tube (2).

10. A laryngeal mask according to claim 9, **characterised in** that the rigid tubing (114) comprises guides in its surface, eg grooves.

11. A laryngeal mask according to any one of the preceding claims, **characterised in** that the airway tubing (2) comprises reinforcing ribs (22) that are integral with the airway tube (2) and axially parallel with the central axis thereof.

12. A laryngeal mask according to any one of the preceding claims, **characterised in** being manufactured in an injection moulding process and from an elastic polymer material.

13. A laryngeal mask according to any one of the preceding claims, **characterised in** that the airway tube (2) comprises at least one sensory indicator bead (10) comprising ribs on the outer face of the tube (2).

14. A laryngeal mask according to any one of the preceding claims, **characterised in** that the mask portion (3) comprises an additional inflatable bellows (11) arranged on or constituting an integral part of the top face (4) of the mask portion.

15. A laryngeal mask according to any one of the preceding claims, **characterised in** that the cuff (9) of the mask portion (3) comprises at least two inflatable lateral bellows (12) that are arranged on the top face (4) of the mask and essentially in parallel with the longitudinal axis of the cuff.

16. A laryngeal mask according to any one of the preceding claims, **characterised in** that at least the mask portion (3) is coated with a lubricant and/or an antibacterial agent.

17. A laryngeal mask according to any one of the preceding claims, **characterised in** that the closed transition face (8) comprises reinforcing ribs.

18. A method of manufacturing a laryngeal mask (1) comprising at least one airway tube (2) and a mask portion (3), which mask portion (3) comprises a top face (4) and a bottom face (5), which bottom face (5) comprises a lumen (6) that communicates with the interior (7) of the tube (2), and which top face (4) comprises a closed transition face (8); and wherein the mask portion is in

the periphery and at least on the bottom face delimited by an inflatable cuff (9), **characterised in** that the process comprises injection moulding of the laryngeal mask (1) in a closed mould part (101), which laryngeal mask (1) [product] comprises at least a part of the airway tube portion (2) and the mask portion (3); that the laryngeal mask (1) [the product] is ejected from the mould (101), wherein the peripheral cuff (9) of the laryngeal mask (1) comprises an annularly extending opening (13) pointing towards the lumen (6) there within and delimited by an upper peripheral edge (14) and a lower peripheral edge (15); and that the upper (14) and the lower (15) peripheral edges are assembled against each other for providing a closing of the annularly extending opening for providing a closed cuff (9).

19. A method according to claim 18, **characterised in** that the distance between the upper (14) and the lower (15) peripheral edge is 1-8 mm.

20. A method according to claim 18 or 19, **characterised in**

- that liquid polymer material is injected into a closed mould (101) at a first pressure and a first temperature, wherein the mould (101) comprises at least one core (102) for providing the inner cavity in tube and mask portions, wherein the mould (101) also comprises two first mould parts, an upper first mould part (104) and a lower first mould part (105), whose interfaces (106) comprise a first interface (107) that is situated in the area corresponding to the lower face (5) of the mask and movable perpendicular to each other's interface (107); and wherein the mould (101) also comprises two further second mould parts (108), whose second movement pattern is perpendicular to the movement line of the first mould part;
- that the lower first mould part (105) is moved away from the upper mould part (104);
- that the two second mould parts (108) are moved away from each other by use of second movement pattern;

- that the core (102) is subsequently moved in the same direction as the lower first mould part (105); and that
  - the laryngeal mask (1) is ejected from the mould.

21. A method according to claim 20, **characterised in** that the entire or portions of the surface of the core (102) is/are rough.

22. A method according to any one of claims 18-21, **characterised in** that the periphery of the mask portion is formed by an upper and a lower periphery configured by a tongue/groove arrangement, also known as a male/female arrangement, that is subsequently assembled against each other, eg by a gluing process for providing an essentially closed peripheral cuff (9).

23. A method according to any one of claims 18-22, **characterised in** that a rigid tubing (114) is arranged in extension of the airway tubing (2) to the effect that an outer jacket configured as an integral part of the airway completely or partially encloses the outer faces of the rigid tubing (114).

24. A method according to claim 23, **characterised in** the airway tube (2) and the mask portion (3) are moulded around the rigid tubing (114).

25. A method according to claim 24, **characterised in** that the airway tube (2), the mask portion (3) and the rigid tubing (114) are manufactured from the same polymer material.

26. A method according to any one of claims 18-25, **characterised in** that a tube (18) is subsequently mounted on the peripheral cuff (9) of the laryngeal mask (1), which tube (18) is at the other end provided with a valve (19) and a pilot balloon (20).

27. Use of the method according to claims 18-26 for the manufacture of a laryngeal mask according to claims 1-17.

28. A laryngeal mask (1') comprising at least one airway tube (2') and a mask portion (3'), which mask portion (3') comprises a top face (4') and a bottom face (5'), said bottom face (5') comprising a lumen (6') that communicates with the tube (2') interior (7'), and said top face (4') comprising a closed transition face (8'), said mask portion (3') being at least on the bottom face in the periphery delimited by an inflatable cuff (9'), **characterised in** that the cuff (9') of the mask portion (3') comprises inflatable means for abutment against a wall of a pharynx opposite a laryngeal opening for providing a tight connection of the mask portion and the laryngeal opening; and that passages are formed between these abutment means and the top face (4') of the mask portion.

29. A laryngeal mask (1') according to claim 28, **characterised in** that the cuff (9') of the mask portion (3') comprises at least two inflatable lateral bellows (12') that are arranged on the top face (4') of the mask (1') and are symmetrical about a longitudinal axis of the cuff (9').

30. A laryngeal mask (1) according to any one of claims 1-17, **characterised in** that the cuff (9) comprises a reinforced section (23) foremost on the top face of the cuff (9).